



311129

7.5  
3/7/91UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: 7 MARCH 1991

SUBJECT: COMBINATION TRAFFIC REPORT/CHAIN OF CUSTODY FORMS  
FROM: JAN PELS, RSCC  
TO: ALL SAMPLERS

The new combination traffic report (TR) and chain of custody (COC) form have been printed. A limited supply of the forms is available for a trial run to work out the bugs. Please use these forms for any work you have coming up in the near future so that we can get your feedback for consideration when preparing the final revision. When you use these new forms, please note any problems you have filling them out and forward these comments to me by March 20, 1990. Any improvements in the forms will be made then prior to the final printing.

Please note that there are certain fields that are optional to fill out, such as samplers initials, split sample section, account code, and regional information. The concept with the new form is to eliminate redundant work by having all of the information that is currently written on the chain of custody form and on the traffic report form combined on one form, so keep this in mind when using the form.

NA

If you are tracking bottle lot numbers, cooler numbers, etc. on the current COC forms, you can use the blank space across the middle of the form or blank space above the top border to write this information in.

HC Alredy Present All H2O YOAS Remember that we do not request dissolved metals. Also, on the organic form, we are preserving all volatiles samples, including residential well samples as of February 1991, so you need to list the preservative number (HCl) in column D.

Note that since you are listing tag numbers and preservatives, that you must put the metals sample information on one line and the cyanide information on another line. This would apply for the volatiles (they will be preserved with HCl) and the BNA and Pest/PCBs fractions (they will have no preservative). Since the metals and cyanide fractions are taken from the same soil bottle, they can be fit on one line (Same goes for organic soils since there are no preservatives).

Since these forms must be filled out on a per cooler basis, like the current chain of custody form, the fact that you can only list up to 10 samples shouldn't be an issue since you are limited by the size of the cooler. A second form can be filled out for additional samples in the cooler.

\* NOTE: CRL Still USES OLD C.O.C forms with cooler #'s  
and a Statement of where the tracking forms are.

Remember to still write in the chain of custody seal numbers in the remarks field or in the TR field. It doesn't matter which of these two boxes you use, as long as this information is on the form. The revised form will have a box for the COC seal numbers.

The inorganic form has extra analyses on it (nitrate/nitrite, fluoride, pH and conductivity). The nitrate/nitrite and fluoride is planned for a new low level water (residential well) RAS SOW, and the pH and conductivity are optional tests under the planned High Concentration SOW. These two RAS SOWs are not in place yet, so these fields should not be used at this time.

Please call if you have any questions on these additional analytes. For routine inorganic analyses on water and soil samples, you still will only ask for total metals and/or cyanide.

The organic form also has an additional field for the current High Concentration SOW, the ARO/TOX. Please call if you have questions about this high concentration analysis. For routine organic analyses on water and soil, you will still only ask for VOA, BNA and/or Pest/PCB.

Note that the organic traffic report says that extra volume is required for the matrix spike/matrix spike duplicate. This only applies to the routine low/medium/water/soil RAS SOWs. Remember that residential well samples (currently a RAS plus SAS) have Performance Evaluation (PE) samples sent with real samples to the lab and that you do not collect extra volume for this contract; you must list the PE samples on this form. You will not have tag numbers for these PEs, nor time/date of sampling, etc.

RL  
Still  
SFS  
MSDS

USE  
OND  
form  
UNTIL  
further  
NOTICE

The lower right hand corner has a section for documenting whether split samples were accepted/declined by any PRPs. If you are currently using a separate form for this purpose, please let me know. The Office of Regional Counsel will need to make a determination on whether you can use this field in place of your current form. This issue was not raised during the review that was done by the ORC.

Attached is an example of the form filled out. Please have samplers review this form carefully prior to using them in the field.

Use the far right empty field to notate which samples are field blanks, field duplicates (i.e., which samples are duplicates of which others), and which are blind QC samples (we rarely send double blind QC samples). This information does not copy onto the lab's copies. Since this information does not go through to the lab's copies, you should designate the inorganic sample(s) to be used for QC by labeling them in some way. The organic sample to be used for the matrix spike/matrix spike duplicate (MS/MSD) analyses for water can be designated but will be apparent by the large volume of sample sent. However, since more than one cooler will be needed to ship this large volume, it is important to designate it

In the middle of the form designate 2 samples - 1 for a lab dup and 1 for a lab spike (MSD). When you pick a MSD for both organic and inorganic it's preferable to take it at a "cleaner" location - A Dup is preferable to take at a more contaminated location (for example - A Downgradient well)

Inorg  
H2O's

for the MS/MSD.

One major change is that the top copy of the form is submitted to the RSCC, with original signatures, to include in the evidence file. SMO receives the second copy and the lab gets the bottom two copies. Once the lab signs their copies, the lab signs them and returns them to SMO and the Region, so that we will have their original signature for the the evidence file. PLEASE STRESS THIS TO ALL FIELD SAMPLERS, SINCE THIS DOCUMENT IS USED TO TRACE THE SAMPLE FROM COLLECTION TO RECEIPT AT THE LAB AND IS A VERY IMPORTANT DOCUMENT. You may make a photocopy to keep in your files, but you must send us the original.

Please use these forms as soon as you can in place of the old traffic report form and chain of custody. Once our small supply is used up, we'll go back to the old forms until the final, revised forms are printed.

An example copy of a completed form attached.

Also attached are instructions prepared by SMO on the use of the forms. Remember that these instructions are general instructions and do not contain regional requirements, so Region V's requirements supercede these instructions (specifically regarding the chain of custody seal numbers being listed, tracking tag numbers and noting which samples are blanks or field duplicates). I have hand written in some of the regional requirements.

Remember that for samples shipped to the CRL, the regular Chain of Custody form must be used with the CRL request forms.

<u>CRL</u>	<u>CLP</u>
<p>ON SW or NW</p> <ul style="list-style-type: none"><li>- Hg required (500ml)</li><li>- MSD</li><li>- USE OLD C.O.C and CRL tracking Forms</li></ul>	<ul style="list-style-type: none"><li>- <u>No</u> Hg</li><li>- MSD</li><li>- USE new C.O.C/OTR -or- USE new C.O.C/ ITR</li></ul>
<p>RW</p> <ul style="list-style-type: none"><li>- Hg required (500ml)</li><li>- MSD</li><li>- USE OLD C.O.C and CRL tracking Forms</li></ul>	<ul style="list-style-type: none"><li>- Hg required(500ml)</li><li>- PE Samples</li><li>- USE new C.O.C/OTR -or- USE new C.O.C/ ITR</li></ul>



United States Environmental Protection Agency  
Contract Laboratory Program Sample Management Office  
PO Box 818 Alexandria, VA 22313  
703-557-2490 FTS 657-2490

# Organic Traffic Report

(For Organic CLP Analysis)

SAS No.  
(if applicable)

Case No.  
1234-5

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier	6. Preser- ative (Enter In Column D)	7. Sample Description (Enter In Column A)					
Regional Information		IV	Your Company	3/1/91	Fed-EX	1. HCl 2. HNO3 3. Na2SO4 4. H2SO4 5. Other (SAS) (Specify) 6. Ice only N. Not preserved	1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)	Triple volume required for matrix spike/matrix spike duplicate analysis sample. Ship medium and high concentration samples in paint cans. See reverse for additional standard instructions. Please indicate sample to spike/duplicate.				
		Sampler (Name)	Your Name	Airbill Number	5678901							
Non-Superfund Program		Sampler Signature	Your signature.	5. Ship To	Lab Name							
Site Name		3. Type of Activity	O&M RIFS SSI ST STPA Other	Address	Attn:							
Site Name Landfill		ENF ER LSI NPLD	PA RA RD STS1									
City, State Chicago, IL		Site Spill ID ZZ										
CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp/ Grab	D Preser- ative from Box 6	E RAS Analysis		F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	
EA101	1	L	G	1	X		5-169813-14	MW-01	MSD	3/1/91 9:00	MEAD1	
EA102	1	L	G	1	X		5-169815-16	MW-02		3/1/91 10:00		
EA102	1	L	G	N	X	X	5-169817-18	MW-02		3/1/91 10:00	MEAD2	
EA103	1	L	G	1	X		5-169819-20	MW-03		3/1/91 11:00	MEAD3	
PV311	5	NA	NA	NA	X		NA					
PT701	5	NA	NA	NA	X		NA					
PP524	5	NA	NA	NA	X		NA					
* Performance evaluation Sample												
Shipment for Case complete? (Y/N) <input checked="" type="checkbox"/> Don't need to designate lab/loc for organics here, <input checked="" type="checkbox"/> but put MSD (if applicable) next to Station Location												
TR COC # 34813-34814												
CHAIN OF CUSTODY RECORD												

Relinquished by: (Signature)  Signature	Date / Time 3/1/91 17:00	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Transferred by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/non

EPA Form 9110-2 (Rev. 10-90) Replaces EPA Form (207B-7), previous edition which may be used

DISTRIBUTION:  
Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

Split Samples  Accepted (Signature)

Declined

001100



United States Environmental Protection Agency  
Contract Laboratory Program Sample Management Office  
PO Box 816 Alexandria, VA 22313  
703-557-2490 FTB 557-2490

# Inorganic Traffic Report

(For Inorganic CLP Analysis)

SAS No.  
(if applicable)

Case No.

12345

1. Project Code	Account Code	2. Region No. Sampling Co.	3. Date Shipped	Carrier	6. Preservative (Enter In Column D)	7. Sample Description (Enter In Column A)	Double volume required for spike/duplicate analysis sample.	
Regional Information		Sampler (Name) <i>Your Name</i>	Airbill Number <i>1234567</i>		1. HNO <sub>3</sub> 2. NaOH 3. HCl 4. H <sub>2</sub> SO <sub>4</sub> 5. Ice only 6. Other (SAS) 7. Waste (SAS) 8. Other (SAS) N. Not preserved	1. Surface Water 2. Ground Water 3. Leachate 4. Rinse 5. Soil/Sediment 6. Oil (SAS) 7. Waste (SAS) 8. Other (SAS) (Specify)	Ship medium and high concentration samples in paint cans.	
Non-Superfund Program		Sampler Signature <i>Your Signature</i>	5. Ship To Lab Name Address Attn:		See reverse for additional standard instructions.			
Site Name <i>Landfill</i>		3. Type of Activity ENF <input checked="" type="checkbox"/> PA ER <input type="checkbox"/> RA LSI <input type="checkbox"/> RD NPLD <input type="checkbox"/> ST STSI <input type="checkbox"/> STPA Other <input type="checkbox"/>	O&M RIFS SSI ST STPA Other			For total or dissolved metals, check only one RAS analysis per each sample.		
City, State <i>Chicago, IL</i>		Site Spill ID <i>ZZ</i>						

CLP Sample Numbers (from labels)	A Enter # from Box 7	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative from Box 6	E - RAS Analysis			F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day Year/Month Sample Collection	I Sampler Initials	J Corresp. CLP Org. Samp. No.
					Metals	Total	Orange					
MEA01	1	L	G 1	X				5-169803	MW-01	3/1/91 9:00	FA101	
MEA01	1	L	G 2	X				5-169804	MW-01	3/1/91 9:00		
MEA02	1	L	G 1	X				5-169805	MW-02	3/1/91 10:00	EA102	
MEA02	1	L	G 2	X				5-169806	MW-02	3/1/91 10:00		
MEA03	1	L	G 1	X				5-169807	MW-03	3/1/91 11:00	EA103	
MEA03	1	L	G 2	X				5-169808	MW-03	3/1/91 11:00		Field dups: MEA03-MEA04
MEA04	1	L	G 1	X				5-169809	MW-03	3/1/91 12:00	EA104	
MEA04	1	L	G 2	X				5-169810	MW-03	3/1/91 12:00		
MEA05	3	L	G 1	X				5-169811	FB-01	3/1/91 13:00		Field Blank
MEA05	3	L	G 2	X				5-169812	FB-01	3/1/91 13:00	EA105	

Shipment for Case complete? (Y/N)

USE MEA01 for spike.  
USE MEA02 for dup.

Monitoring metal metals were CHAIN OF CUSTODY RECORD filtered.

TR COC Seal #s

34815-34812

Relinquished by: (Signature) <i>Signature</i>	Date / Time 3/1/91 17:00	Received by: (Signature)	Relinquished by: (Signature) <i>Signature</i>	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none

C. Seals  
Go  
Other place

EPA Form 9110-1 (Rev. 11-80) Replaces EPA Form (2078-8), previous edition which may be used.

DISTRIBUTION:  
Green - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

Split Samples  Accepted (Signature)

Declined

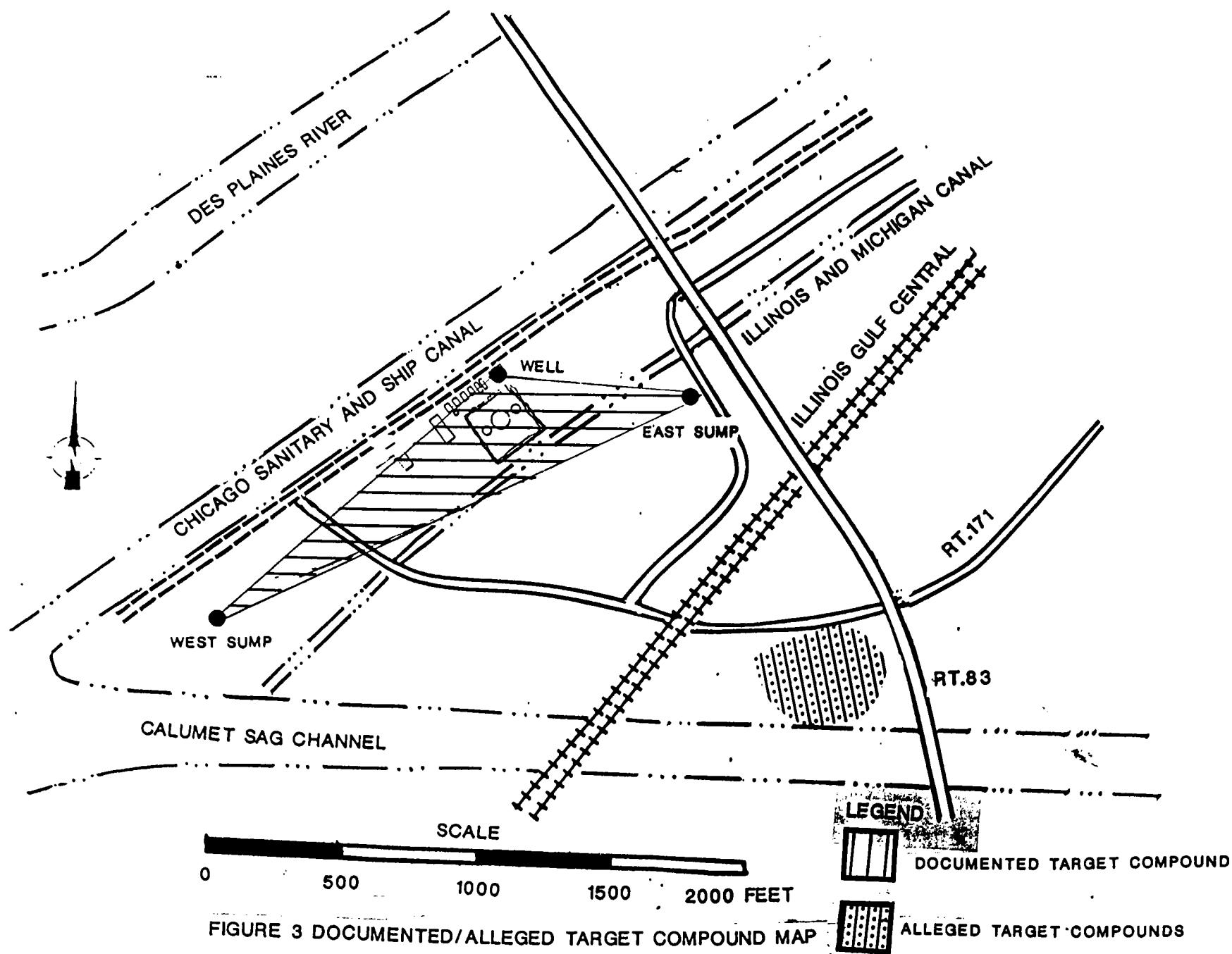
\* FOR HQ - CROSS OFF dissolved and write in HQ - USE #6 for INORGANIC and specify with an \*

CHAIN OF CUSTODY RECORD *Cooler 13 # [13 ]*

PROJ. NO.	PROJECT NAME					NO. OF CONTAINERS	11. AMBER EXTRACTABLES 40ML VOA (HCl) AMPULE			REMARKS <i>Low. CONC. MATRIX</i>
FIN0690	TDDH F05-R40B-005   CASE# 16382   SAS# 6092E						TAG #'S			
SAMPLERS: (Signature) <i>[Signature]</i>										
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION					
ENG 92	5-9-91	1310		X	RW1	6	3	3		5-164954-59 DRINKING WATER
ENG 93	5-9-91	1345		X	RW2	6	3	3		5-164963-68 DRINKING WATER
ENG 94	5-9-91	1345		X	RW3	6	3	3		5-164972-77 DRINKING WATER
PV 765	N/A	N/A			PES- VOA	1		1		N/A N/A
PU 264	N/A	N/A			PES- A/B/N	1		1		N/A N/A
PQ 877	N/A	N/A			PES- PEST/PCB	1		1		N/A N/A
										<i>LOT #'S: 11.A-0299013; 40ml - B01930A3.</i>
										<i>COTR IN COOLER # [13 ]</i>
Relinquished by: (Signature) <i>[Signature]</i>		Date / Time 5/9/91, 1630	Received by: (Signature)			Relinquished by: (Signature)		Date / Time	Received by: (Signature)	
Relinquished by: (Signature)		Date / Time	Received by: (Signature)			Relinquished by: (Signature)		Date / Time	Received by: (Signature)	
Relinquished by: (Signature)		Date / Time	Received for Laboratory by: (Signature)			Date / Time		Remarks SHIPPED VIA F/X TO: S3 AIRBILL #: 9295286851 CUSTODY SEALS #: 129348, 129349		

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-00775



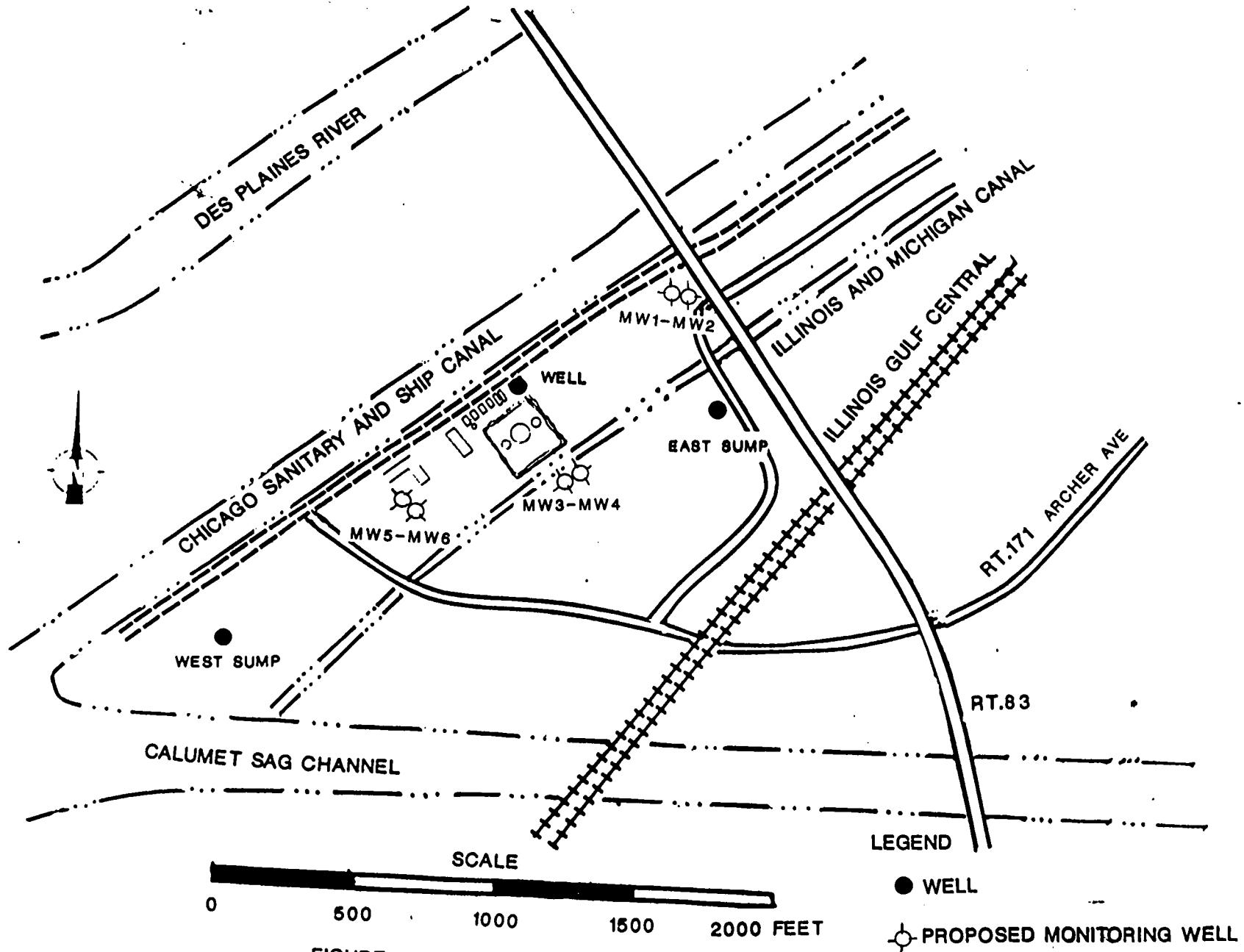


FIGURE 5 WELL LOCATION/SAMPLE LOCATION MAP

will be used as background to characterize the water quality of the aquifer. The downgradient samples will be used to document an observed release to groundwater, to help determine waste characteristics and to document migration of waste from the site. See Table 2 for sampling parameters.

Soil samples collected while drilling that appear to be visually contaminated or that produce high readings when screened with field monitoring instrument (e.g. HNu or OVA) will be packaged and shipped to U.S. EPA CLP Laboratories for chemical analysis, according to U.S. EPA Protocol. These soil samples from split spoon sampling and drill cuttings

will be sufficient for waste characterization of the groundwater pathway. On-site surface soil samples may be collected as necessary during the following stages of the LSI. Table 2 contains the sample parameters to be tested. Also see Appendix C for sample parameter detection limits.

LOCATION	MATRIX (✓)						RATIONALE FOR DETERMINING SAMPLE LOCATION	PARAMETERS <sup>1</sup>					
	SOIL	SED	OW	SW	AIR	WSTE		N/B/N	POSS/PCB	VOA	METAL	CN <sup>-</sup>	OTHER
MW 1	✓						Upgradient locations, MW1 + MW2, will serve as a background sample location.	✓	✓	✓	✓	✓	
MW 2	✓							✓	✓	✓	✓	—	
MW 3	✓						Downgradient locations, MW3 - MW6, will document waste characteristics	✓	✓	✓	✓	✓	
MW 4	✓						and will help document any observed release to G.W.	✓	✓	✓	—	✓	
MW 5	✓							✓	✓	✓	✓	✓	
MW 6	✓							✓	✓	✓	✓	✓	
DUP	✓						Duplicate sample for QA/QC	✓	✓	✓	✓	✓	
Blanks							✓ Field blank for QA/QC (Distilled H <sub>2</sub> O)	✓	✓	✓	✓	✓	
S 1	✓						S1-S6 will be collected on-site and/or from . . . cuttings during	✓	✓	✓	✓	✓	
S 2	✓						the installation of monitoring wells. The	✓	✓	✓	✓	✓	
S 3	✓						soil samples will be collected from material	✓	✓	✓	✓	✓	
S 4	✓						in the aquifer, and from other locations as	✓	✓	✓	✓	—	
S 5	✓						professional judgement dictate. The samples	✓	✓	✓	✓	✓	
S 6	✓						will be collected in an effort to characterize waste.	✓	✓	✓	✓	✓	
S 7	✓						Potential Background	✓	✓	✓	✓	✓	
TOTALS	7	7	1					15	15	15	15	15	

<sup>1</sup>Target Compound List Attached

Table 2  
PROPOSED SAMPLE DESCRIPTIONS  
(INCLUDING ALL LABORATORY BLANKS AND DUPLICATES)

4.7 Investigative Derived Waste: All borings will be continuously monitored for contaminants by an Organic Vapor Analyzer (OVA). Any drilling spoils or development water that exhibit above background readings will be considered to be contaminated and will be containerized, labeled as either solid or liquid, and will be left on site. Derived material that doesn't appear to be contaminated based on field screening procedures will be left on the ground surface in the area of the boring. All disposable clothing, cartridges, and general refuse will be decontaminated and disposed of in a municipal dumpster or other appropriate waste container.

4.8 Health And Safety Considerations: Level D personal protective equipment is anticipated for all on-site activities. During drilling, cuttings from the borehole, and the breathing zone above the borehole will be monitored with site entry equipment. Standard Action Levels and corresponding levels of protection will be followed.

at all times while drilling. If warranted, personal protection will be upgraded. The upgrade and abandonment levels are listed below.

- o OVA 128: 0-1 ppm Above background - Level D  
1-5 ppm Above background - Level C  
5-50 ppm Above background - Level B  
>50 ppm Abandon Site

o O<sub>2</sub> Meter: <19.5% O<sub>2</sub> or >25% O<sub>2</sub> - Abandon Site

o Explosimeter: >25% LEL - Abandon Site

o Rad Mini: >0.1 <sup>m</sup>rem/hour on Alarm Sounds - Abandon Site

o Monitor: Any Reading - Abandon Site

5.0 Subcontracting Estimate: The F.I.T. anticipates all drilling and well installations to be completed in level D.

The total drilling subcontracting cost estimate for working in level D is \$ 34,295. At all drilling and well installed

work is upgraded to level C, the cost is estimated to be

\$ 42,445. Total estimated cost for all work done in level

B is \$ 50,565. Please see appendix D for an itemized

breakdown of drilling subcontracting costs. If

investigative derived waste is containerized, an additional

subcontracting cost for removal and disposal will be incurred. The quantity and type of material will determine the cost of removal and disposal.

6.0 Estimated Level of Effort: The number of hours needed to complete the field work, preparation of the report, and health and safety considerations for the Hannah Marine site are 1568. This number assumes work will be completed in level D. If the level of protection is upgraded to level C, the hours may increase by  $\approx 10\%$ . Working in level B, the time required would likely increase by  $\approx 30\%$ . Please see appendix E for a breakdown of estimated L.O.E. hours.

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## SAMPLE BOTTLE REQUIREMENTS

### Soil Samples:

$$8 \text{ oz} - 2 \times \frac{\#}{\#} = \underline{\quad}$$

$$120 \text{ ml} - 2 \times \frac{\#}{\#} = \underline{\quad}$$

# = number of soil samples

✓ *matrix*  
✓ *cont'd*

✓ *SVOAs*  
✓ *post. 1 pcbs*

CRL - Drinking Water, Surface Water, or Monitoring Well Samples (SEE NOTE)

CLP - Drinking Water, Samples

VOL<sup>s</sup> ✓ 1 liter amber -  $(3 \times \frac{\#}{\#}) + 5$  (for MSD) =    # = number of samples

40 ml -  $(3 \times \frac{\#}{\#}) + 5$  (for MSD) =    (+ 1 blank + 1 duplicate

per matrix)

1 liter plastic -  $2 \times \frac{\#}{\#} = \underline{\quad}$

✓ *SVOAs*  
✓ *post. 1 pcbs*

CLP - Surface Water, or Monitoring Well Samples (SEE NOTE)

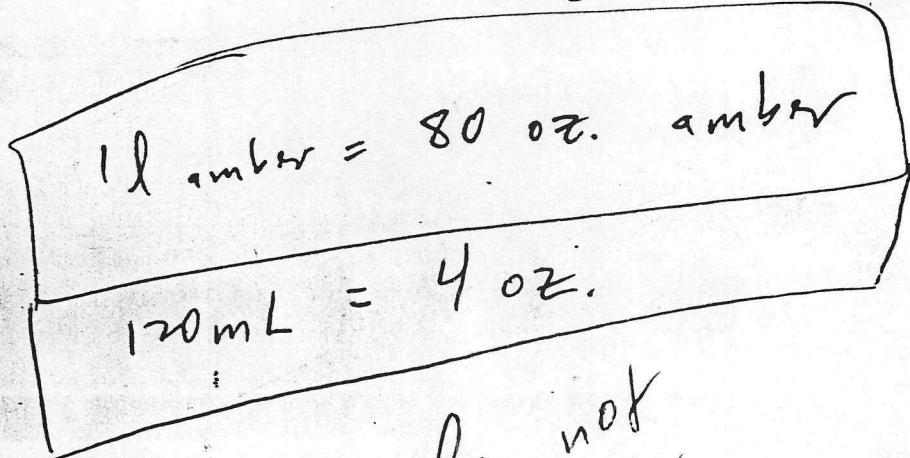
VOL<sup>s</sup> ✓ 80 oz amber -  $(2 \times \frac{\#}{\#}) + 2$  (for MSD) =    # = number of samples

40 ml -  $(2 \times \frac{\#}{\#}) + 4$  (for MSD) =    (+ 1 blank + 1 duplicate

per matrix)

\*NOTE (An additional 2-1 liter plastic bottles per sample will be required when sampling ALL monitoring well metals for filtering purposes.

An additional 1-1 liter plastic bottle per sample will be required for monitoring well mercury going to CRL for filtering purposes).



→ 1 l. not  
filter  
F.W.

or  
need to